



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,089	06/10/2002	Ebrahim Simhaee	26691E592US2	7105

7278 7590 08/05/2004
DARBY & DARBY P.C.
P. O. BOX 5257
NEW YORK, NY 10150-5257

EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/064,089	Applicant(s) SIMHAEE, EBRAHIM	
	Examiner Jeff H. Aftergut	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3-4-04, 9-26-02</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 2 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Larson et al (U.S. Patent 4,017,351).

Larson et al suggested that it was known at the time the invention was made to inflate a collapsed air cell dunnage (note that the reference suggested that the films were initially joined together to form the chambers which were to be filled with air because it was expensive to transport air and the reference suggested that the method was useful for filling such a preformed sheet with air, see column 1, lines 8-22, for example). The reference suggested that the sheet material included a base layer and a bubble layer connected thereto wherein there is no gas disposed between the layers and wherein the bubble layer included conduits interconnecting selected groups of bubbles and a common channel extending longitudinally on the sheet and in fluid communication with each of the conduits, see Figures 8 and 10 and note that the common channel connects to each row of bubbles and that the individual bubbles are connected in fluid communication via conduits. The reference suggested that a nozzle was inserted into the leading

Art Unit: 1733

edge of the channel in order to introduce fill gas into the channel with a nozzle 69. the reference additionally suggested that end of the conduits (20 in Figure 8) which fed from the main channel 18 would have been sealed utilizing a heat sealing means including a heated shoe 81 having parallel rails 82. The nozzle structure additionally included a cutter for cutting the channel so that the inflated air cell dunnage could be separated from the nozzle in use, see blade 78 with edge 79, column 6, lines 46-50. While the reference did not envision that expelling air from the sheet prior to inflating the same with the disclosed inflation system, the reference clearly desired to perform the operation with a sheet of material, which was flat and uninflected initially. It is not believed that the language of the preamble of the claim positively recites steps which requires the inclusion of expulsion of air from between the sheets. In any event, it should be noted that Larson '351 clearly desired to remove air from between the sheets in the processing therein. It would have been obvious to one of ordinary skill in the art at the time the invention was made to remove any air from between the preformed bubble wrap sheet material after manufacture as such would have avoided unnecessary costs associated with shipping air to the packaging manufacturer in the operation of Larson '351.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1733

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Larson (U.S. Patent 4,017,351) or Perkins et al (U.S. 6,209,286) further taken with any one of Troy (U.S. 3,660,189), Chang et al (4,894,265) or Horsky (3,817,803).

The reference to Larson '351 is discussed above in paragraph 3 and applicant is referred to the same for a complete discussion of the reference. The reference failed to teach that those skilled in the art at the time the invention was made would have incorporated a roller arrangement for the heat sealing of the conduits in the manufacturing operation. Perkins et al (which has an effective filing date of March 9, 1999, as the provisional application supported the description herein below) suggested that it was known at the time the invention was made to form an inflated dunnage material with a system which included an inflating means such as a nozzle 70 which is part of the inflation tube 44. The reference additionally suggested that one skilled in the art would have associated a blade with the inflation nozzle (tube 44) which is depicted in Figure 7 as element 78, column 8, lines 23-37. The reference also suggested that after inflation the system included a seal forming means 52 including two heating elements 80. It should be noted that in Perkins a common channel was utilized to inflate the individual chambers (see Figure 1, channel 18) and that the individual chambers were connected to this channel through conduits 20. The applicant is advised that in an apparatus claim the material worked upon is given little or no patentable weight (the only requirement is that the machine be capable of acting upon such materials, where here the device of Perkins is clearly capable of acting upon the recited material). The fact that the bubble sheet had the air expelled from it prior to inflation is immaterial to the claimed structure of the inflating apparatus. The reference to Perkins et al, like Larson, failed to teach that the heat sealing means was a roller heat sealing mechanism.

However, in the art of manufacturing air cell dunnage, it was notoriously well known to employ a heat sealing mechanism which included a pair of sealing rollers to seal the air within the individual chambers as evidenced by any one of Troy, Chang et al or Horsky. More specifically, each one of Troy (sealing wheel and pressure wheels 13 and 14 respectively which were used to seal the edges of the sheet material in the operation of making a bubble wrap sheet), Chang et al (pairs of heat sealing rolls 31 and 32 which were used to seal the films in the manufacture of a dunnage for packaging materials) and Horsky (rollers 29 and 39 which were used to heat seal air filled pockets in between films to make a dunnage) all suggested that it was known in the art at the time the invention was made to incorporate a roller pair to heat seal the films in the manufacture of a dunnage. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate heat sealing rollers for heat sealing the conduits after the filling operation in either one of Perkins et al or Larson as such was an art recognized functionally equivalent means for achieving a seal in the art of manufacturing dunnage as suggested by any one of Troy, Chang et al or Horsky.

Drawings

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: cavities 42 and dotted lines 44 referred to in paragraph [0018] in the specification. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

Art Unit: 1733

any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The disclosure is objected to because of the following informalities: in paragraph [0005] of the specification at line 2, the language "120 E c" appears. As this appears to be referring to a temperature, it is believed that applicant should place this language in proper form. Likewise in paragraph [0005] on line 4 of the paragraph the language "20 E c" appears which again should be corrected to clarify that the number referred to is a temperature with the proper degree symbol.


Appropriate correction is required.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA

August 3, 2004